

REMARKS

Claims 1-4 are currently pending in the subject application. Claims 1-4 are presented to the Examiner for further prosecution on the merits.

Applicants' appreciate the Examiner's acknowledgement of a claim for foreign priority, and receipt of a copy of the certified priority document in a related application.

A. Introduction

In the Office Action mailed July 8, 2002, the Examiner provisionally rejected claims 1-4 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 18-23 and 27-32 of copending Application Serial No. 09/724,186. The Examiner rejected claims 1-4 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-14 of U.S. Patent No. 6,160,344. The Examiner rejected claims 1 and 3 under 35 U.S.C. § 102(b) as being anticipated by applicants' admitted prior art, and as being anticipated by U.S. Patent No. 6,133,686 to Inoue et al. ("the Inoue et al. reference"). The Examiner rejected claims 2 and 4 under 35 U.S.C. § 103(a) as being unpatentable over applicants' admitted prior art or the Inoue et al. reference.

In view of the following remarks, it is respectfully submitted that each of the Examiner's rejections have been traversed and that each of the claims of the present application is in condition for allowance. Accordingly, notification to such effect is respectfully requested.

B. Asserted Provisional Rejections Under the Judicially Created Doctrine of Obviousness-Type Double Patenting

In the outstanding Office Action, the Examiner provisionally rejected claims 1-4 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 18-23 and 27-32 of copending Application Serial No. 09/74,186.

A Terminal Disclaimer has been filed to obviate this double patenting rejection.

C. Asserted Rejections Under the Judicially Created Doctrine of Obviousness-Type Double Patenting

In the outstanding Office Action, the Examiner rejected claims 1-4 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-14 of U.S. Patent No. 6,160,344.

A Terminal Disclaimer has been filed to obviate this double patenting rejection.

D. Asserted Rejections Under 35 U.S.C. § 102(b) (AAPA)

In the outstanding Office Action, the Examiner rejected claims 1 and 3 under 35 U.S.C. § 102(b) as being anticipated by applicants' admitted prior art, stating:

Applicant's admitted prior art (Fig. 3) discloses applicant's claimed flat panel having inner and outer surfaces satisfying applicant's claimed relation of $Y1=Y2$.

Office Action of July 8, 2002, at p. 3.

However, the Examiner is respectfully redirected to the applicants' admitted prior art as shown in FIGS. 3 and 4 and described at p. 2, line 9-p. 3, line 10, of the subject application, and to the invention as claimed in claims 1 and 3. Specifically, claims 1 and 3-claim, in relevant part:

A flat panel for a cathode ray tube comprising:
an outer surface having a flat configuration; and
an inner surface having a non-spherical, convexly curved configuration relative to the outer surface and satisfying formula 1, $Y_1 \leq Y_2$, wherein Y_1 represents a vertical distance between the outer surface and a refracted screen image on a central axis of the panel, and Y_2 represents a vertical distance between the outer surface and the refracted screen image in peripheral areas other than the central axis of the panel.

FIGS. 1 and 2 of the subject application illustrate a novel flat panel 20 for a cathode ray tube as claimed in claims 1 and 3. Specifically, FIGS. 1 and 2 illustrate the flat panel 20 having an outer surface 21, which is flat, and an inner surface 22, which is curved convexly relative to the outer surface 21, but not spherically. FIGS. 3 and 4 of the subject application illustrate a conventional flat panel 30 for a cathode ray tube according to the applicants' admitted prior art. Specifically, FIGS. 3 and 4 illustrate the conventional flat panel 30 having an outer surface 31, which is flat, and an inner surface 32, which is also flat. Therefore, one patentable distinction between the invention as claimed and the prior art is that the invention claims a non-spherical, convexly curved inner surface, unlike the prior art, which teaches a flat inner surface.

FIG. 4 illustrates a refracted screen image 35 that may be formed by the conventional flat panel 30 of the prior art. The refracted screen image 35 formed by the conventional flat panel 30 appears inwardly concave to a user due to the refraction of the screen image 35 while passing through the conventional configuration of the flat panel 30. The present invention as claimed solves this problem by allowing the refracted screen image 23, illustrated in FIG. 2, to be formed to appear flat to a user. This patentable distinction over the prior art is claimed in claims 1 and 3 by formula 1, which states that $Y_1 \leq Y_2$, wherein Y_1 is the vertical distance between the outer

surface 21 and the refracted screen image 23 on a central axis of the panel, and Y_2 represents a vertical distance between the outer surface 21 and the refracted screen image 23 in peripheral areas other than the central axis of the panel.

Because the screen image 35 of the conventional flat panel 30 is inwardly concave, as shown in FIG. 4, the distance between the screen image 35 and the outer surface 31 in peripheral areas other than the central axis of the panel, which corresponds to the distance Y_2 in the invention as claimed, is necessarily smaller than the distance between the outer surface 31 and the refracted screen image 35 on a central axis of the panel, which corresponds to the distance Y_1 in the invention as claimed. Therefore, contrary to the Examiner's rejection of claims 1 and 3, in applicants' admitted prior art, Y_1 cannot be equal to Y_2 , as may be seen in FIG. 4.

Therefore, claims 1 and 3 of the subject application are patentably distinguished over the applicants' admitted prior art for at least the reasons described above, those reasons being that the inner surface of the claimed flat panel is non-spherically, convexly curved and the outer surface is flat, whereas in the admitted prior art, the inner surface is flat, and because the distance Y_1 as defined above is less than or equal to the distance Y_2 as defined above, which is an impossibility in the prior art having an inwardly concave screen image. Therefore, these rejections of claims 1 and 3 are respectfully traversed, and reconsideration and withdrawal of these rejections are respectfully requested.

E. Asserted Rejections Under 35 U.S.C. § 102(b) (the Inoue et al. Reference)

In the outstanding Office Action, the Examiner rejected claims 1 and 3 under 35 U.S.C. § 102(b) as being anticipated by the Inoue et al. reference.

These rejections are also respectfully traversed for at least the reason that the Inoue et al. reference is not a proper prior art reference under 35 U.S.C. § 102. As stated in the first paragraph of the subject application, this application is a continuation of U.S. Application Serial No. 09/724,186 filed November 27, 2000, which is a continuation of U.S. application Serial No. 09/058,544 filed April 10, 1998, now U.S. Patent No. 6,160,344, which is based on Korean patent application No. 97-13493, filed April 12, 1997, and Korean patent application No. 98-11926, filed April 4, 1998.

✓ The filing date of the Inoue et al. reference is February 19, 1998, and the effective filing date of the subject application is the filing date of Korean Patent Application No. 97-13493, which is April 12, 1997, which precedes the filing date of the Inoue et al. reference.

The subject matter of claims 1-4 of the subject application is fully disclosed in Korean Patent Application No. 97-13493, from which this application properly depends. A certified copy of the foreign priority document was submitted, and receipt of the document was acknowledged in the outstanding Office Action. Nevertheless, a certified English language translation of the priority document is submitted herewith.

Accordingly, reconsideration and withdrawal of these rejections of claims 1 and 3 are respectfully requested.

E. Asserted Rejections Under 35 U.S.C. § 103(a)

In the outstanding Office Action, the Examiner rejected claims 1 and 3 under 35 U.S.C. § 102(b) as being unpatentable over applicants' admitted prior art or the Inoue et al. reference.

Again, these rejections are respectfully traversed. As stated above, the invention as claimed in claims 1 and 3 is believed to be patentably distinguished over the applicants' admitted prior art. Also, it has been shown that the Inoue et al. reference is not a proper prior art reference.

Accordingly, reconsideration and withdrawal of these rejections are respectfully requested.

G. Conclusion


Since the prior art references, whether taken alone or in combination, neither anticipate nor render obvious claims 1-4, it is submitted that these claims are in condition for allowance, and a notice to such effect is respectfully requested.

If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing remarks, reconsideration of this application is respectfully requested, and favorable action upon the claims is hereby requested.

Respectfully submitted,

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**PETITION and
DEPOSIT ACCOUNT CHARGE AUTHORIZATION**

This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying papers may also be charged to Deposit Account No. 50-1645.